IN THE CLAIMS:

1.(Currently Amended)   A virtual path configuration apparatus used in a virtual private network to interconnect a plurality of user networks via virtual paths and that is arranged in each node, comprising:

a configuration information setting unit that <u>includes an input device for inputting setting commands and information on ports and nodes, and that</u> sets configuration information that is information about configuration of the virtual private network;

a configuration information sharing unit that shares the configuration information with other virtual path configuration apparatuses in the virtual private network by transmitting the configuration information set by the configuration information setting unit to the other virtual path configuration apparatuses or receiving configuration information from the other virtual path configuration apparatuses; and

a virtual path configuration unit that configures the virtual path based on the shared configuration information.

2.(Original)   The virtual path configuration apparatus according to claim 1, wherein the configuration information setting unit sets additional configuration information that is information that is to be added to the configuration information set previously,

the configuration information sharing unit transmits the additional configuration information to the other virtual path configuration apparatuses and receives additional configuration information from the other virtual path configuration apparatuses, and

the virtual path configuration unit reconfigures the virtual path based on configuration information obtained by adding the additional configuration information to the configuration information set previously.

3. (Original)   The virtual path configuration apparatus according to claim 1, wherein the configuration information setting unit sets deletion configuration information that is information that is to be deleted from the configuration information set previously,

the configuration information sharing unit transmits the deletion configuration information to the other virtual path configuration apparatuses and receives deletion configuration information from the other virtual path configuration apparatuses, and

the virtual path configuration unit reconfigures the virtual path based on configuration information obtained by deleting the deletion configuration information from the configuration information set previously.

4. (Original)   The virtual path configuration apparatus according to claim 1, wherein the configuration information sharing unit monitors states of the other virtual path configuration apparatus.

5. (Original)   The virtual path configuration apparatus according to claim 1, wherein the configuration information includes information about nodes to which the user networks attach, and the virtual path configuration unit configures virtual paths between the nodes in a full mesh manner.

6. (Original)   The virtual path configuration apparatus according to claim 1, wherein the configuration information includes information about ports to which the user networks attach, and the virtual path configuration unit configures virtual paths between the ports in a full mesh manner.

7. (Currently Amended)   A virtual path configuration method executed on a virtual path configuration apparatus used in a virtual private network for interconnecting a plurality of user networks via virtual paths and that is arranged in each node, comprising:

       inputting setting commands and information on ports and nodes;

       setting configuration information that is information about configuration of the virtual private network;

       sharing the configuration information with other virtual path configuration apparatuses in the virtual private network by transmitting the configuration information set by the configuration information setting unit to the other virtual path configuration apparatuses or receiving configuration information from the other virtual path configuration apparatuses; and

       configuring the virtual path based on the shared configuration information.

8. (Original)   The virtual path configuration method according to claim 7, wherein the setting includes setting additional configuration information that is information that is to be added to the configuration information set previously,

       the sharing includes transmitting the additional configuration information to the other virtual path configuration apparatuses or receiving additional configuration information from the other virtual path configuration apparatuses, and

       the configuring includes reconfiguring the virtual path based on configuration information obtained by adding the additional configuration information to the configuration information set previously.

9. (Original)   The virtual path configuration method according to claim 7, wherein the setting includes setting deletion configuration information that is information that is to be deleted from the configuration information set previously,

       the sharing includes transmitting the deletion configuration information to the other virtual path configuration apparatuses or receiving deletion configuration information from the other virtual path configuration apparatuses, and

       the configuring includes reconfiguring the virtual path based on configuration information obtained by deleting the deletion configuration information from the configuration information set previously.

10. (Original)   The virtual path configuration method according to claim 7, wherein the sharing includes monitoring states of the other virtual path configuration apparatus.

11. (Original)   The virtual path configuration method according to claim 7, wherein the configuration information includes information about nodes to which the user networks attach, and the virtual path configuration unit configures virtual paths between the nodes in a full mesh manner.

12. (Original)   The virtual path configuration method according to claim 7, wherein the configuration information includes information about ports to which the user networks attach, and the virtual path configuration unit configures virtual paths between the ports in a full mesh manner.

13. (Currently Amended) A computer readable recording medium storing instructions, ~~program~~ ~~that realizes a virtual path configuration method to be executed on~~ which when executed by a computer in a virtual path configuration apparatus used in a virtual private network for interconnecting a plurality of user networks via virtual paths and that is arranged in each node, cause the computer to perform operations, comprising:
        inputting setting commands and information on ports and nodes;
        setting configuration information that is information about configuration of the virtual private network;
        sharing the configuration information with other virtual path configuration apparatuses in the virtual private network by transmitting the configuration information set by the configuration information setting unit to the other virtual path configuration apparatuses or receiving configuration information from the other virtual path configuration apparatuses; and
        configuring the virtual path based on the shared configuration information.

14. (Currently Amended) The computer readable recording medium ~~program~~ according to claim 13, wherein the setting includes setting additional configuration information that is information that is to be added to the configuration information set previously,
        the sharing includes transmitting the additional configuration information to the other virtual path configuration apparatuses or receiving additional configuration information from the other virtual path configuration apparatuses, and
        the configuring includes reconfiguring the virtual path based on configuration information obtained by adding the additional configuration information to the configuration information set previously.

15. (Currently Amended) The computer readable recording medium ~~program~~ according to claim 13, wherein the setting includes setting deletion configuration information that is information that is to be deleted from the configuration information set previously,
        the sharing includes transmitting the deletion configuration information to the other virtual path configuration apparatuses or receiving deletion configuration information from the other virtual

path configuration apparatuses, and

the configuring includes reconfiguring the virtual path based on configuration information obtained by deleting the deletion configuration information from the configuration information set previously.

16. (Currently Amended) The computer <u>readable recording medium</u> ~~program~~ according to claim 13, wherein the sharing includes monitoring states of the other virtual path configuration apparatus.

17. (Currently Amended) The computer <u>readable recording medium</u> ~~program~~ according to claim 13, wherein the configuration information includes information about nodes to which the user networks attach, and the virtual path configuration unit configures virtual paths between the nodes in a full mesh manner.

18. (Currently Amended) The computer <u>readable recording medium</u> ~~program~~ according to claim 13, wherein the configuration information includes information about ports to which the user networks attach, and the virtual path configuration unit configures virtual paths between the ports in a full mesh manner.